What is claimed is:

1. In a local area network ("LAN") system comprising at least one client, a method for automatically assigning a MAC address to said at least one client comprising a client-side method, wherein said client-side method comprises:

selecting a MAC address;

monitoring broadcasts of MAC address advertisement frames;

determining whether any of the monitored MAC address advertisement frames were the same as the selected MAC address;

broadcasting a selected MAC address request frame, if it is determined that none of the broadcast MAC address advertisement frames were the same as the selected MAC address;

determining whether a MAC address response frame was received; and

broadcasting a selected MAC address advertisement frame if no MAC address response frame was received.

2. The method of Claim 1, wherein said client-side method further comprises:

determining whether a duplicate MAC address frame was received;

monitoring again broadcasts of MAC address advertisement frames if no duplicate MAC address frame was received; and

determining whether any broadcasts of MAC address advertisement frames were of said selected MAC address;

sending a duplicate MAC address frame, if it is determined that there was a broadcast of a MAC address advertisement frame of said selected MAC address;

returning to the act of broadcasting MAC address advertisement frames.

3. The method of Claim 2, wherein said client-side method further comprises:

determining whether any of said at least one server confirm the availability of said selected MAC address if a MAC address response frame was received;

employing said MAC address; and

proceeding to said act of broadcasting said selected MAC address advertisement frame.

4. The method of Claim 2, wherein said client-side method further comprises rejecting said requested MAC address if a duplicate MAC address frame was received.

5. The method of Claim 2, wherein said client-side method further comprises indicating a warning message if no server confirms the availability of said selected MAC address.

6. The method of Claim 2, wherein said client-side method further comprises indicating a warning message if a duplicate MAC address frame is received.

7. The method of Claim 2, wherein said client-side method further comprises:

returning to the act of selecting a MAC address if no server confirms the availability of the selected MAC address.

8. The method of Claim 2, wherein said client-side method further comprises:

returning to the act of selecting a MAC address if a duplicate MAC address frame was received for the selected MAC address.

9. In a local area network ("LAN") system comprising at least one client and at least one server, a method for automatically assigning a MAC address to said at least one client comprising:

monitoring broadcasts of MAC address advertisement frames;

determining whether any in-use MAC addresses were requested in any MAC address request frames; and

sending an MAC address response indicating that the MAC address requested is available if the requested MAC address is available.

10. The method of Claim 9, wherein said method further comprises:

monitoring broadcasts of MAC address advertisement frames;

developing an in-use MAC address database; and

sending an MAC address response indicating that the MAC address requested is available if the requested MAC address is available.

11. The method of claim 10, wherein said method further comprises sending an MAC address response indicating that said requested MAC address is not available.

12. A network device comprising at least one client, wherein each of said at least one client comprises a processor and a memory; wherein said memory contains a program which when executed causes the processor to perform the acts comprising:

selecting a MAC address;

monitoring broadcasts of MAC address advertisement frames;

determining whether any of the monitored MAC address advertisement frames were the same as the selected MAC address;

broadcasting a selected MAC address request frame, if it is determined that none of the broadcast MAC address advertisement frames were the same as the selected MAC address;

determining whether a MAC address response frame was received; and

broadcasting a selected MAC address advertisement frame if no MAC address response frame was received.

13. The network device of Claim 12, wherein said program further comprises the acts of:

determining whether a duplicate MAC address frame was received;

monitoring again broadcasts of MAC address advertisement frames if no duplicate MAC address frame was received; and

determining whether any broadcasts of MAC address advertisement frames were of said selected MAC address;

sending a duplicate MAC address frame, if it is determined that there was a broadcast of a MAC address advertisement frame of said selected MAC address; and

returning to the act of broadcasting MAC address advertisement frame.

14. The network device of Claim 13, wherein said program further comprises the acts of:

determining whether any of said at least one server confirm the availability of said selected MAC address if a MAC address response frame was received;

employing said MAC address; and

proceeding to said act of broadcasting said selected MAC address advertisement frame.

15. The network device of Claim 13, wherein said program further comprises the act of rejecting said requested MAC address if a duplicate MAC address frame was received.

16. The network device of Claim 13, wherein said program further comprises the act of indicating a warning message if no server confirms the availability of said selected MAC address.

17. The network device of Claim 13, wherein said program further comprises the act of indicating a warning message if a duplicate MAC address frame is received.

18. The network device of Claim 13, wherein said program further comprises the act of returning to the act of selecting a MAC address if no server confirms the availability of the selected MAC address.

19. The network device of Claim 13, wherein said program further comprises the act of returning to the act of selecting a MAC address if a duplicate MAC address frame was received for the selected MAC address.

20. A network device comprising at least one client and at least one server, wherein each of said at least one server comprises a processor and a memory; wherein said memory contains a program which when executed causes the processor to perform the acts comprising:

monitoring broadcasts of MAC address advertisement frames;

determining whether any in-use MAC addresses were requested in any MAC address request frames; and

sending an MAC address response indicating that the MAC address requested is available if the requested MAC address is available.

21. The network device of Claim 20, wherein said program further comprises the acts of:

monitoring broadcasts of MAC address advertisement frames;

developing an in-use MAC address database; and

sending an MAC address response indicating that the MAC address requested is available if the requested MAC address is available.

22. The network device of Claim 21, wherein said program further comprises the act of sending a MAC address response indicating that said requested MAC address is not available.

23. A network device comprising at least one client, wherein each of said at least one client comprises:

means for selecting a MAC address;

means for monitoring broadcasts of MAC address advertisement frames;

means for determining whether any of the monitored MAC address advertisement frames were the same as the selected MAC address;

means for broadcasting a selected MAC address request frame, if it is determined that none of the broadcast MAC address advertisement frames were the same as the selected MAC address;

means for determining whether a MAC address response frame was received; and

means for broadcasting a selected MAC address advertisement frame if no MAC address response frame was received.

24. The network device of Claim 23, wherein each of said at least one client further comprises:

means for determining whether a duplicate MAC address frame was received;

means for monitoring again broadcasts of MAC address advertisement frames if no duplicate MAC address frame was received; and

means for determining whether any broadcasts of MAC address advertisement frames were of said selected MAC address;

means for sending a duplicate MAC address frame, if it is determined that there was a broadcast of a MAC address advertisement frame of said selected MAC address;

means for returning to the act of broadcasting of MAC address advertisement frame.

25. The network device of Claim 24, wherein each of said at least one client further comprises:

means for determining whether any of said at least one server confirm the availability of said selected MAC address if a MAC address response frame was received;

means for selecting one of said at least one server that sends a MAC address response frame indicating the availability of said selected MAC address; and

means for proceeding to said act of broadcasting said selected MAC address advertisement frame.

26. The network device of Claim 24, wherein each of said at least one client further comprises means for rejecting said requested MAC address if a duplicate MAC address frame was received.

27. The network device of Claim 24, wherein each of said at least one client further comprises means for indicating a warning message if no server confirms the availability of said selected MAC address.

28. The network device of Claim 24, wherein each of said at least one client further comprises means for indicating a warning message if a duplicate MAC address frame is received.

29. The network device of Claim 24, wherein each of said at least one client further comprises means for returning to the act of selecting a MAC address if no server confirms the availability of the selected MAC address.

30. The network device of Claim 24, wherein each of said at least one client further comprises a means for returning to the act of selecting a MAC address if a duplicate MAC address frame was received for the selected MAC address.

31. A network device comprising at least one client and one server, wherein each of said at least one server comprises:

means for monitoring broadcasts of MAC address advertisement frames;

means for determining whether any in-use MAC addresses were requested in any MAC address request frames; and

means for sending an MAC address response indicating that the MAC address requested is available if the requested MAC address is available.

32. The network device of Claim 31, wherein each of said at least one server further comprises:

means for monitoring broadcasts of MAC address advertisement frames;

means for developing an in-use MAC address database; and

means for sending an MAC address response indicating that the MAC address requested is available if the requested MAC address is available.

33. The network device of Claim 31, wherein each of said at least one server further comprises means for sending an MAC address response indicating that said requested MAC address is not available.

34. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for automatically assigning a MAC address to at least one client, said method comprising:

selecting a MAC address;

monitoring broadcasts of MAC address advertisement frames;

determining whether any of the monitored MAC address advertisement frames were the same as the selected MAC address;

broadcasting a selected MAC address request frame, if it is determined that none of the broadcast MAC address advertisement frames were the same as the selected MAC address;

determining whether a MAC address response frame was received; and

broadcasting a selected MAC address advertisement frame if no MAC address response frame was received.

35. The method of Claim 34, wherein said client-side method further comprises:

determining whether a duplicate MAC address frame was received;

monitoring again broadcasts of MAC address advertisement frames if no duplicate MAC address frame was received; and

determining whether any broadcasts of MAC address advertisement frames were of said selected MAC address;

sending a duplicate MAC address frame, if it is determined that there was a broadcast of a MAC address advertisement frame of said selected MAC address;

returning to the act of broadcasting MAC address advertisement frames.

36. The method of Claim 35, wherein said client-side method further comprises:

determining whether any of said at least one server confirm the availability of said selected MAC address if a MAC address response frame was received;

employing said MAC address; and

proceeding to said act of broadcasting said selected MAC address advertisement frame.

37. The method of Claim 35, wherein said client-side method further comprises rejecting said requested MAC address if a duplicate MAC address frame was received.

38. The method of Claim 35, wherein said client-side method further comprises indicating a warning message if no server confirms the availability of said selected MAC address.

39. The method of Claim 35, wherein said client-side method further comprises indicating a warning message if a duplicate MAC address frame is received.

40. The method of Claim 35, wherein said client-side method further comprises:

returning to the act of selecting a MAC address if no server confirms the availability of the selected MAC address.

41. The method of Claim 35, wherein said client-side method further comprises:

returning to the act of selecting a MAC address if a duplicate MAC address frame was received for the selected MAC address.

42. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for automatically assigning a MAC address to at least one client, said method comprising:

monitoring broadcasts of MAC address advertisement frames;

determining whether any in-use MAC addresses were requested in any MAC address request frames; and

sending an MAC address response indicating that the MAC address requested is available if the requested MAC address is available.

43. The method of Claim 42, wherein said method further comprises:

monitoring broadcasts of MAC address advertisement frames;

developing an in-use MAC address database; and

sending an MAC address response indicating that the MAC address requested is available if the requested MAC address is available.

44. The method of claim 43, wherein said method further comprises sending an MAC address response indicating that said requested MAC address is not available.